## ABSTRACT OF THE DISCLOSURE

An AM detecting apparatus includes a voltage comparator and an AND circuit. The voltage comparator compares a detection signal a low-pass filter outputs with a no-signal potential. The AND circuit outputs, when the amplitude of an AM signal is higher than the reference value, one of a first control signal and second control signal in response to a comparison result of the voltage comparator 5, and outputs, when the amplitude of the AM signal is lower than the reference value, the first control signal. The phase of the VCO signal is controlled such that the phase difference between the AM signal and VCO signal agrees with the control signal the AND circuit outputs. The AM detecting apparatus can carry out the coherent detection of the desired signal in the AM signal even during overmodulation.